ALTINEX®
Easy to install - Easy to use - Easy to maintain

Audio Visual Systems for

Collaborative Workspaces

Standard Meeting Space

What is missing here?

Standard Meeting Space

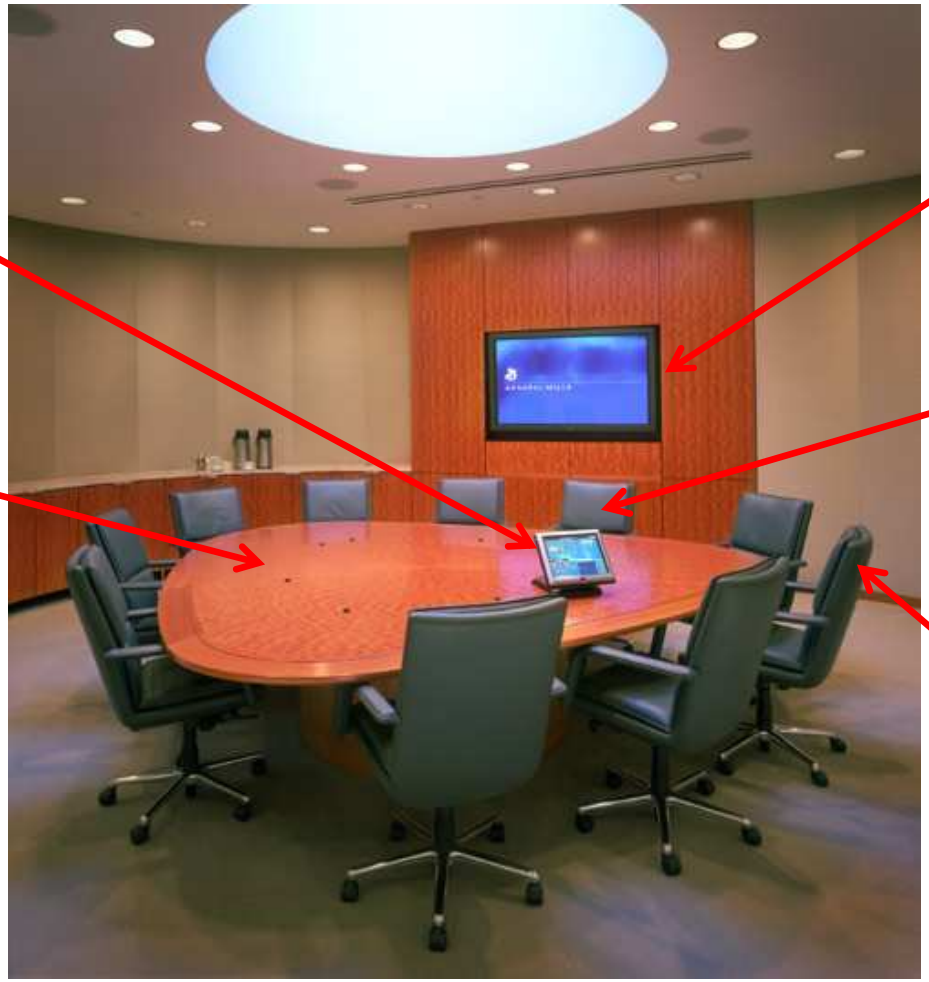
What is missing here?

- A display that everyone can see
- Ability to send your laptop video to a display
- Ability for each participant to decide when they want to display their information.

Standard Meeting Space

What are collaboration difficulties with this setup?

Standard meeting space


Single control point
No AV connections for Laptops
Display is far away
Some participants do not see display
Too many people for effective collaboration

What are collaboration difficulties with this setup?

Standard Boardroom Space

Single point of control

Single Laptop connection

No AV connections for Laptops

No AV interaction between participants

Designed for single presenter

Standard Meeting Space
Audio Video (AV) System

Laptop

VCR/DVD

Satellite

Room PC

Central Audio Video Switcher

SWITCHER

Large Screen Projector / Display

Environment Control

Central Controller

Is Collaboration a New Paradigm?

Collaboration Defined

The act of working jointly with others especially in an intellectual endeavor

What happens when people collaborate?

Information is easily absorbed

They share information

They learn

They become engaged

They focus on the same task

What is needed is a
collaborative environment to avoid

“Laptop Huddle” Syndrome

The AccessGrid Project

Single display Wall

Central control of what is shown

Multiple projectors

Collaboration Room (1998)

The MIT iCampus Outreach Initiative

(1999)

9 people/table

STANFORD
UNIVERSITY

Team Space

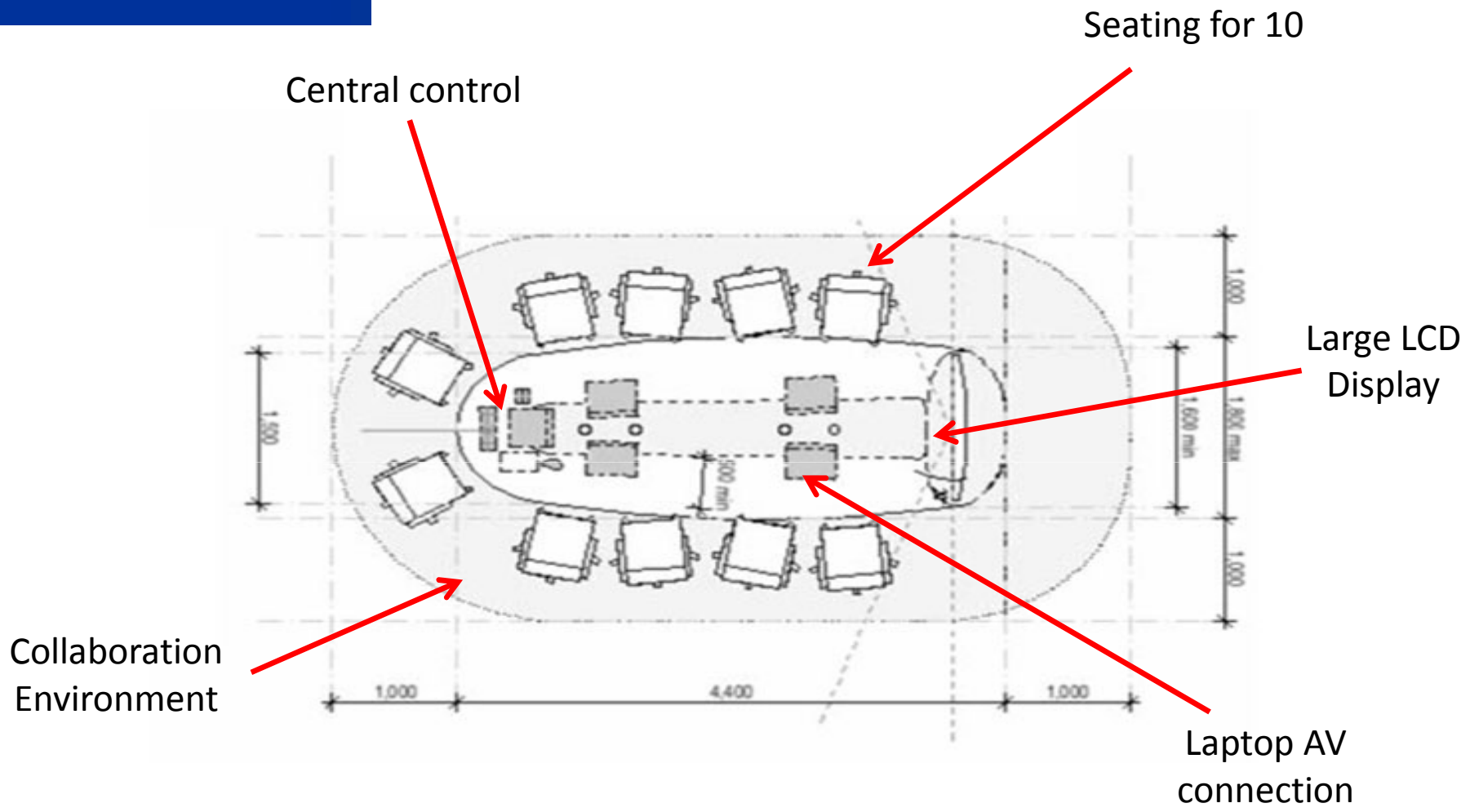
5 years of research at Stanford
Computer Science Department (2004)

Tidebreak

TeamSpot

Commercial application of Team Space for Business and Education (2007)

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA



Collaboration Pod Module (2005)

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

The Learning Lab … a place for active learning

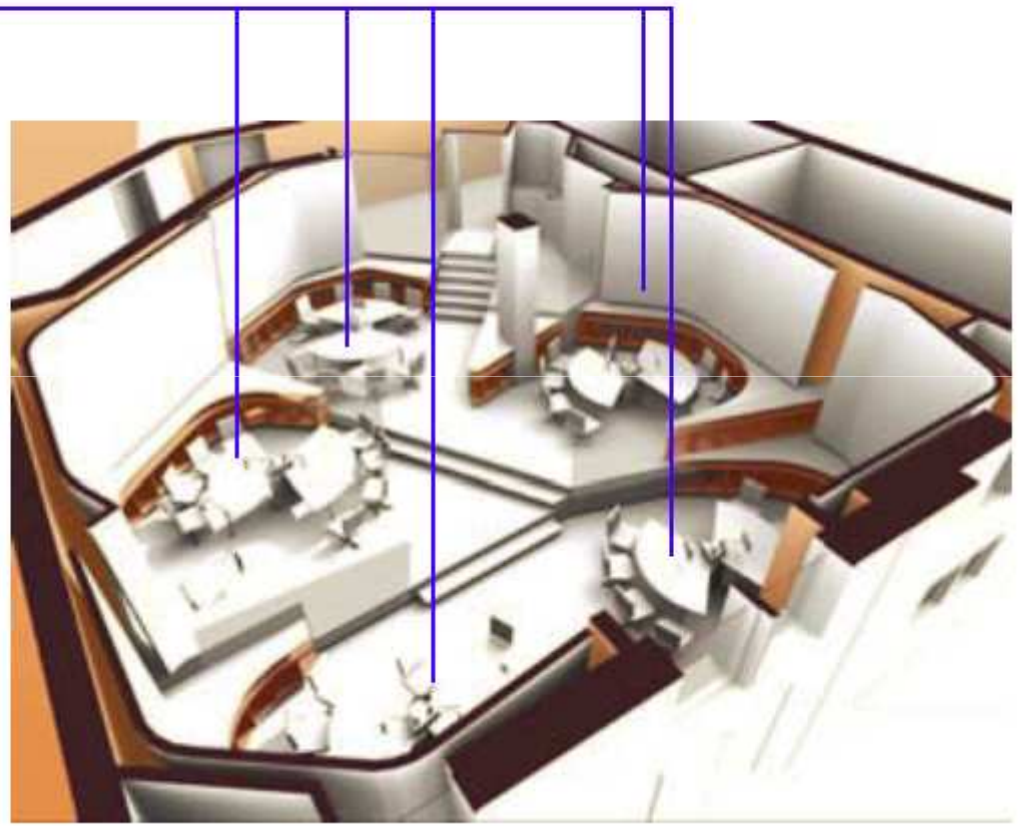
There are 5 work zones

.. each for 2 groups of up to 4 students

.. set on different levels with global / local controls and lighting

.. a swivel desk arrangement for flexibility in grouping

.. each with IT support



Collaboration Classroom (2006)

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

Collaboration environment

8 people per zone

Projection surface

4 per table

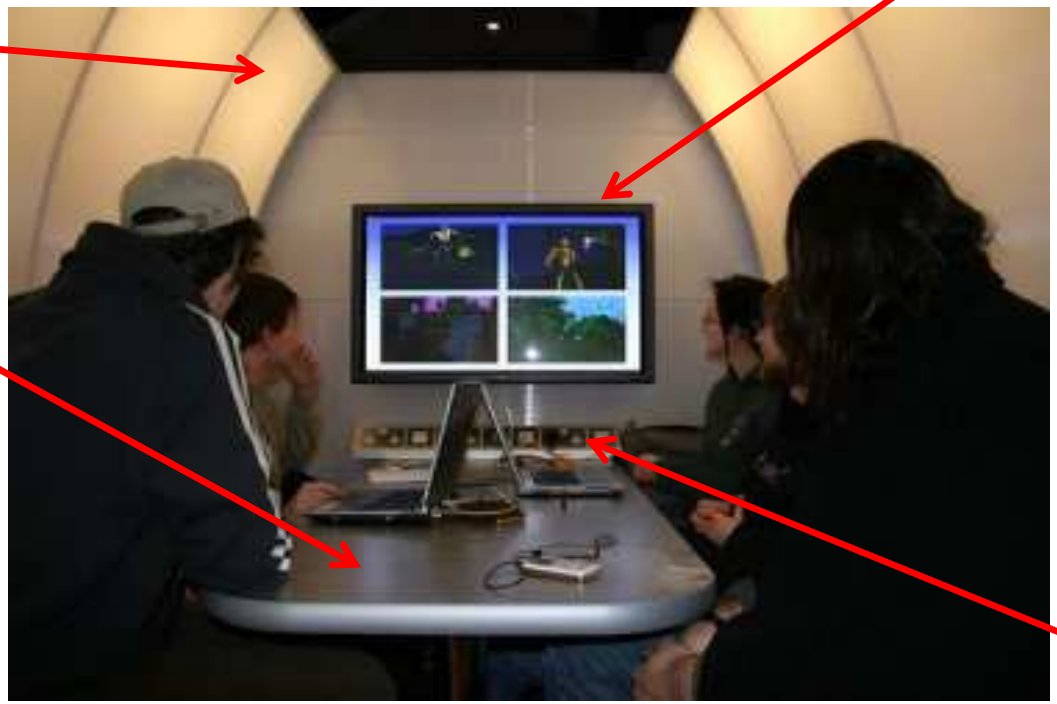
Room PCs are used

The Learning Lab (2006)

University of BRISTOL

Shared large screen display

Acoustically isolated environment



4-6 people

Laptop AV connections

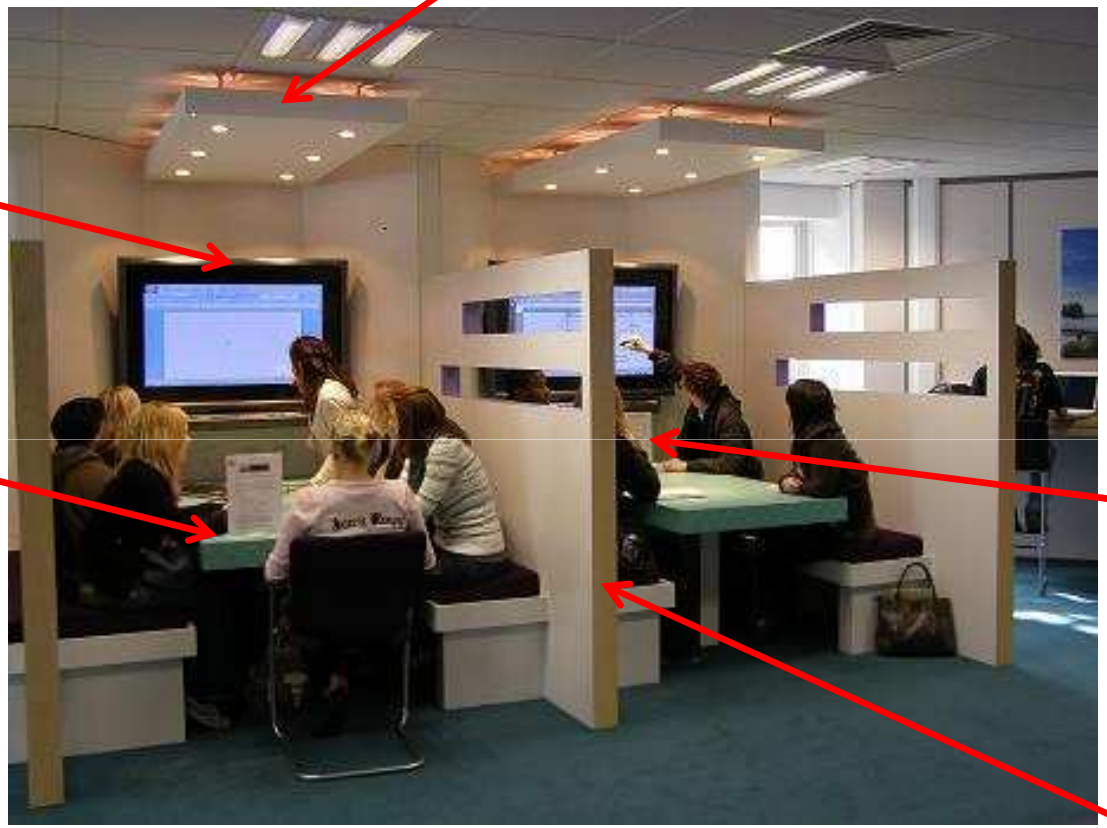
Collaboration Booth concept developed in University of BRISTOL, UK. (2010)

Association of College & Research Libraries
A Division of the American Library Association

Spot Lighting
Screen friendly

Large Display

6 people per booth



Single Laptop connection

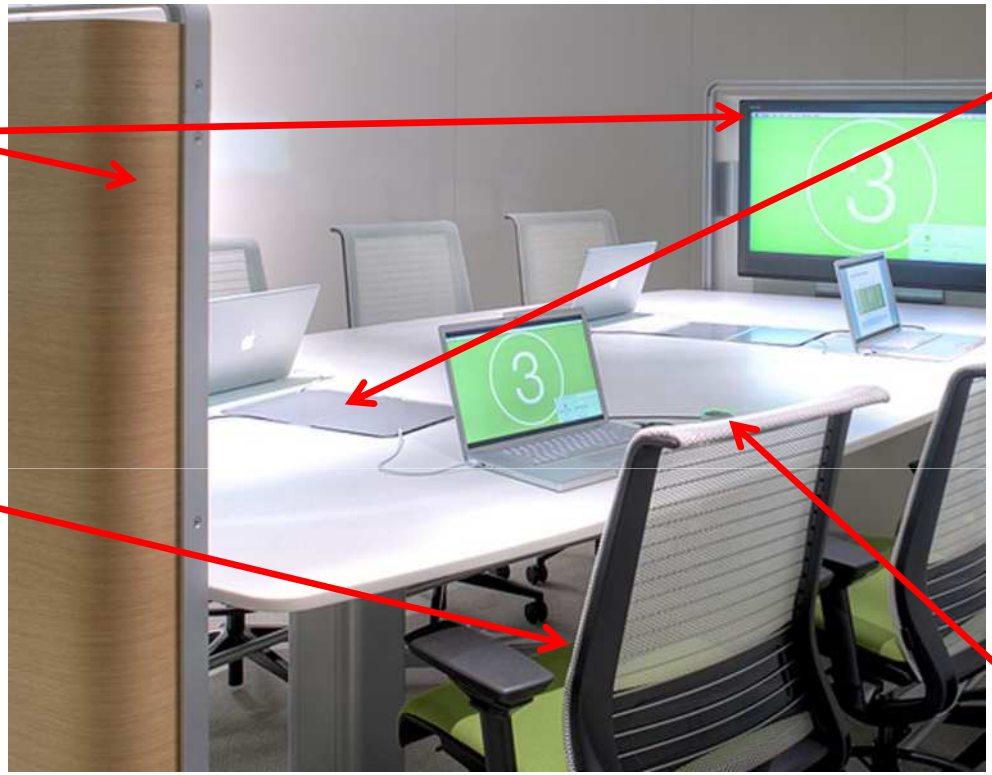
Acoustical Isolation

Library – Social Learning/Study Spaces

Steelcase

media:scape encompasses collaboration environment for businesses (2009)

Steelcase



media:scape encompasses collaboration environment for businesses (2009)

Common Terminology

1. Collaborative meeting space
2. Collaboration booth
3. Collaboration classroom
4. Collaboration pod module
5. Social learning/study space

Summary of the Current State of Technology

1. Cluster size 4 to 8 people
2. Local large screen display (>42”)
3. Laptop connectivity (AV and IP)
4. Distributed control of the display
5. Focus on learning/collaboration not technology
6. Comfortable Environment
7. Projection Displays (optional)

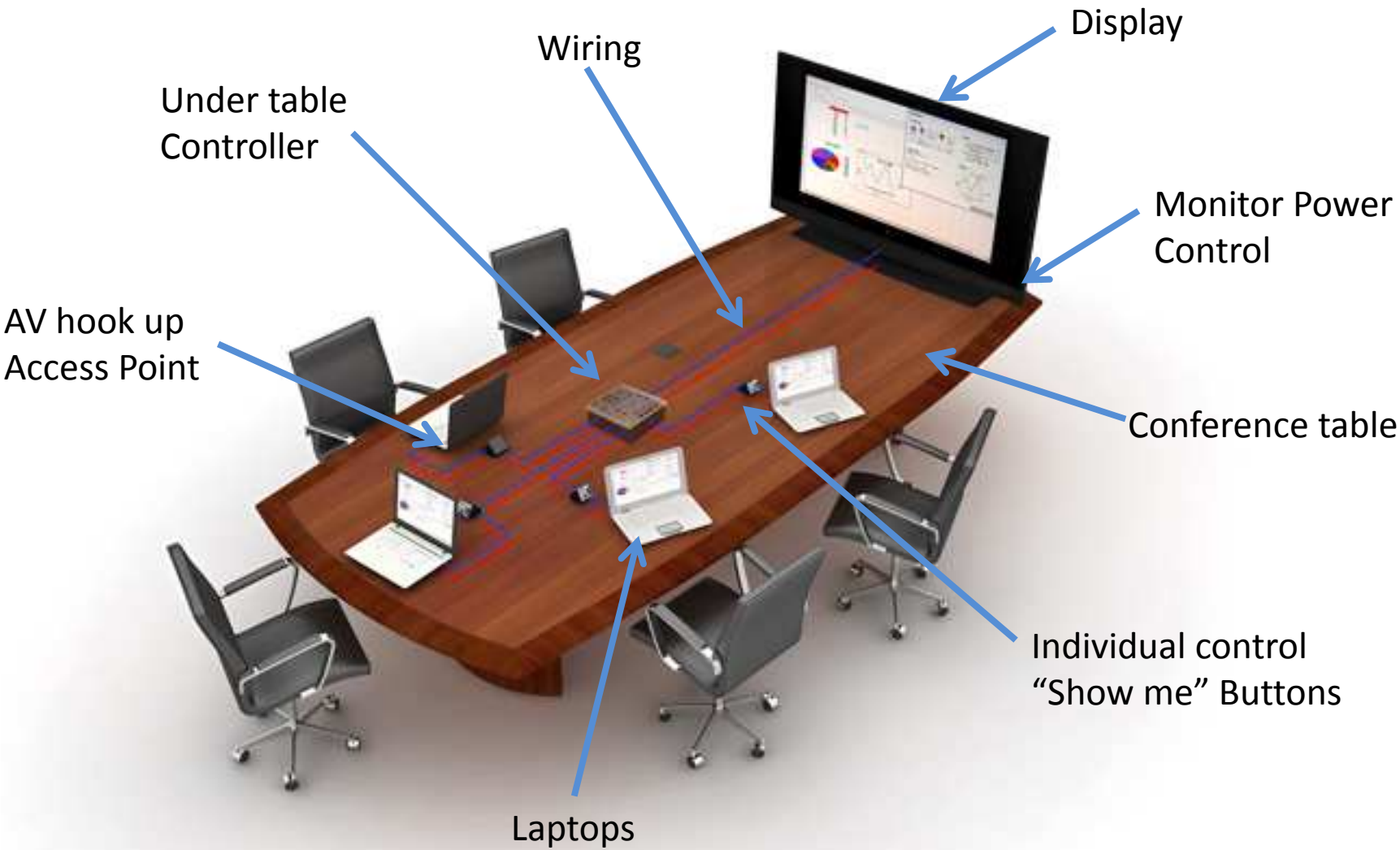
Educational Collaboration

Business Collaboration

We are currently in transition from **educational** collaboration to **business** collaboration AV solutions.

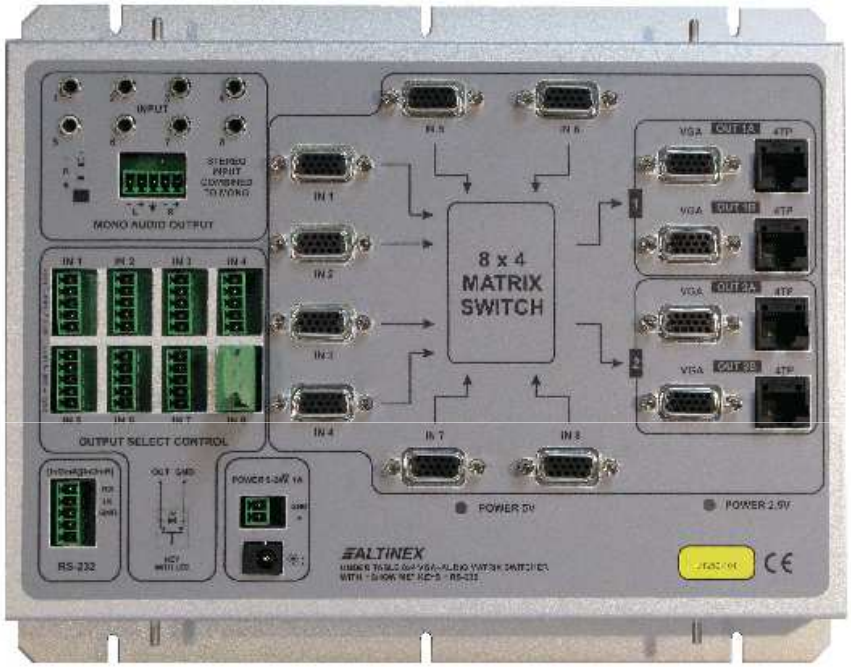
Business Collaboration System Requirements

1. Common shared display in close proximity to users
2. Individual control for sending laptop image to a shared display
3. Seating for 4 to 6 people
4. Seamless power up / down sequence
5. Integration of room PC
6. Integration of Video Conferencing



Typical Collaboration System

Under Table Controller



The heart of the system is the switcher that routes all signals to displays and provides control ports and power management.

UT250-101

Under Table Controller

Audio

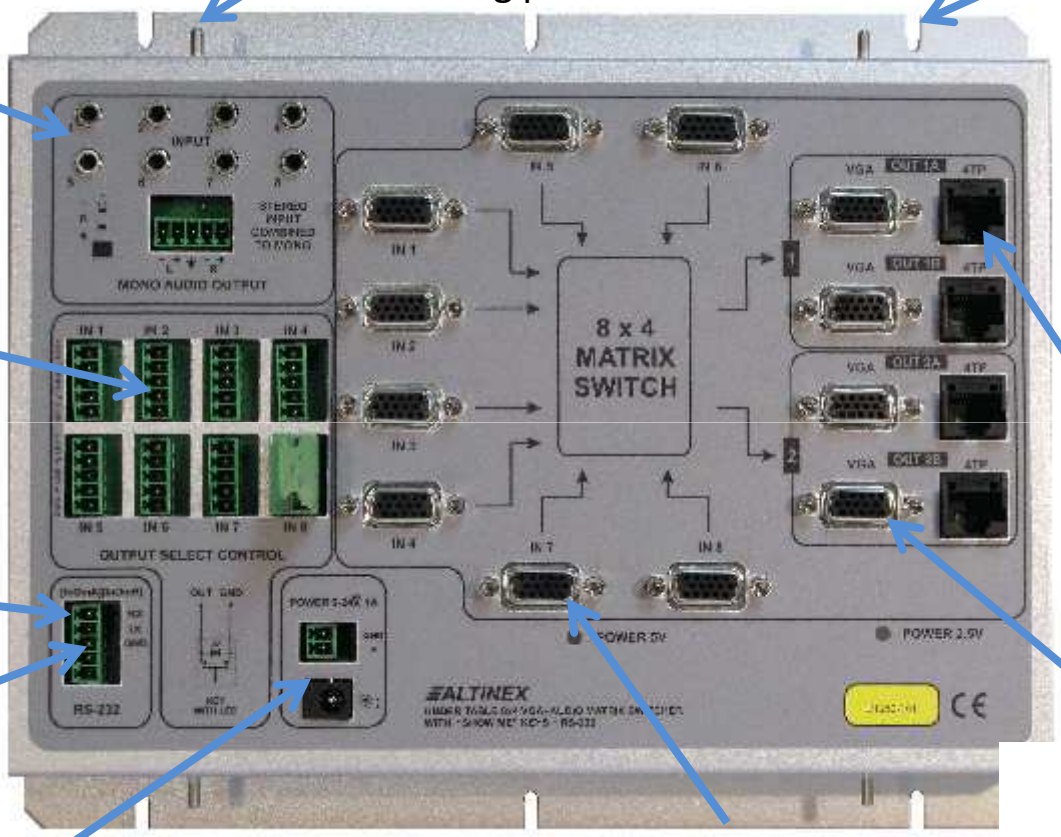
Computer Video

Control

User Interface

Power Interface

Under Table Controller



8x1 audio switcher
+ Volume control

Shroud
mounting posts

6 mounting slots

16 “Show Me”
buttons
controller

4 CAT5 outputs

RS-232
display
control

4 VGA outputs

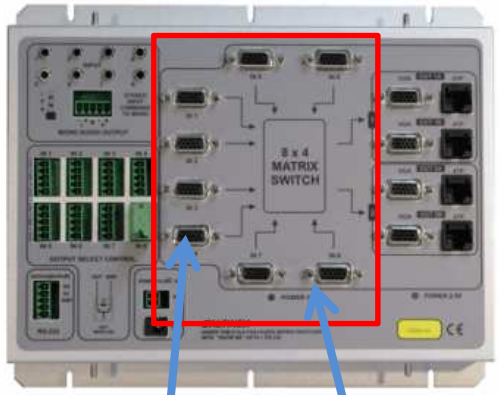
Monitor
Power
Control

2.1mm power jack
TB power

8 VGA inputs with 2
inputs for room PC and VC

Under Table Controller

Inputs Capabilities



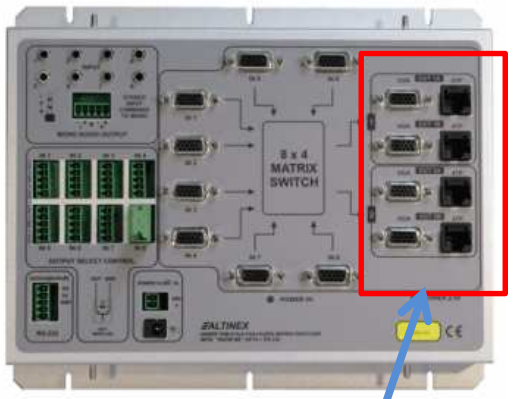
Inputs
1 - 6

Input 7 & 8

1. Input 1-6 – General purpose VGA inputs
2. Input 7 and 8 are programmable as general purpose or dedicated.
3. Input 7 can be used as room PC or Logo Input
4. Input 8 can be used as VC
5. Converters can be added to adapt HDMI signal both for input and output.

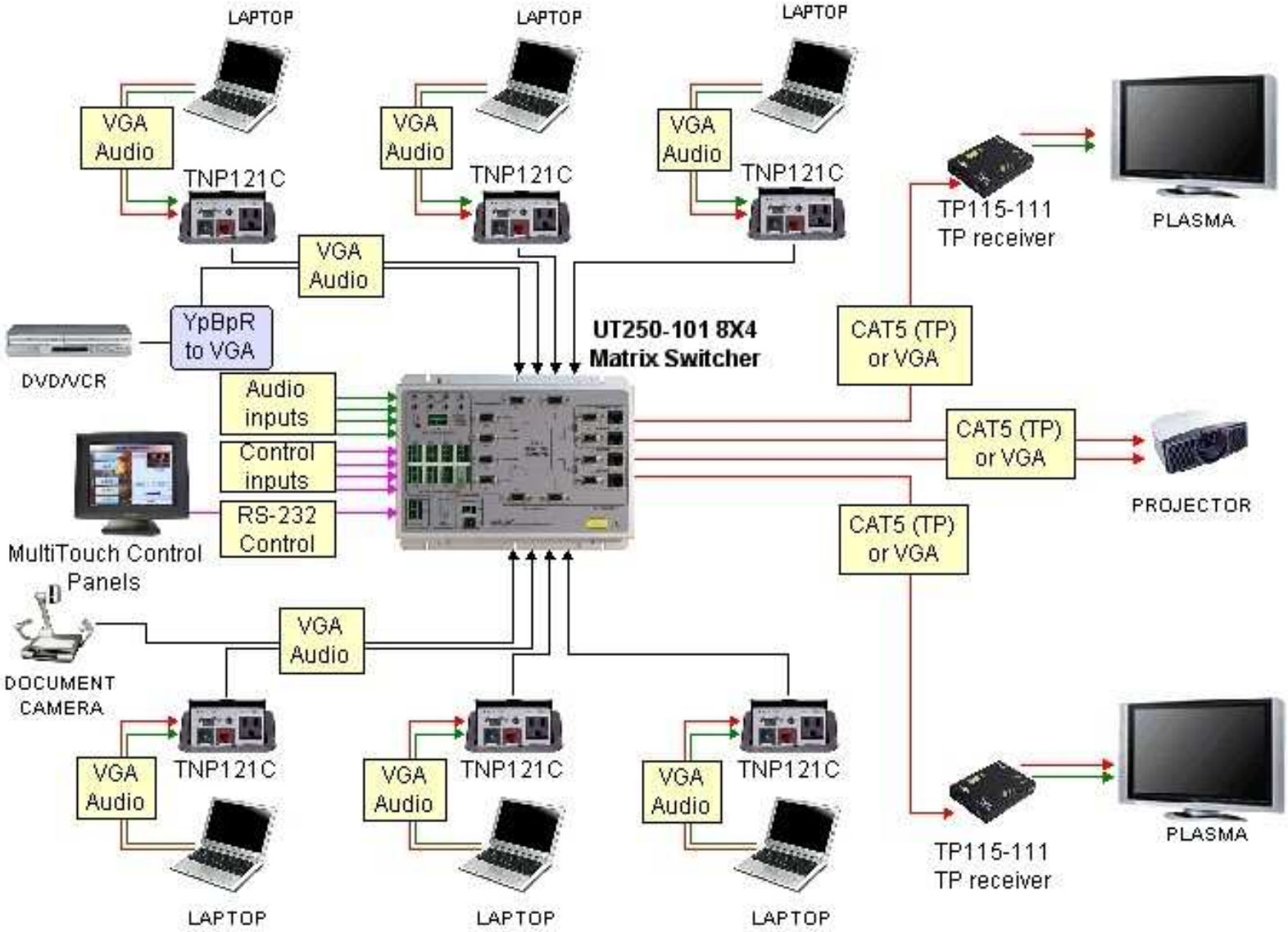
Under Table Controller

Outputs Capabilities



Outputs

1. Standard VGA outputs
2. CAT5 (Twisted pair) outputs work directly with CAT5 receivers.
3. Outputs can be combined to provide signal distribution
4. 2 outputs are controlled with “Show me” Buttons
5. 4 outputs can be controlled with external controller (MultiTouch)



System Diagram

Under Table Controller

Additional Capabilities

1. Auto Power UP/Down monitors
2. Auto switching between inputs
3. Programming EDID information for each input to match monitor's format.
4. Power through connector to power external interfaces.
5. 2 wire "Show me" button interface

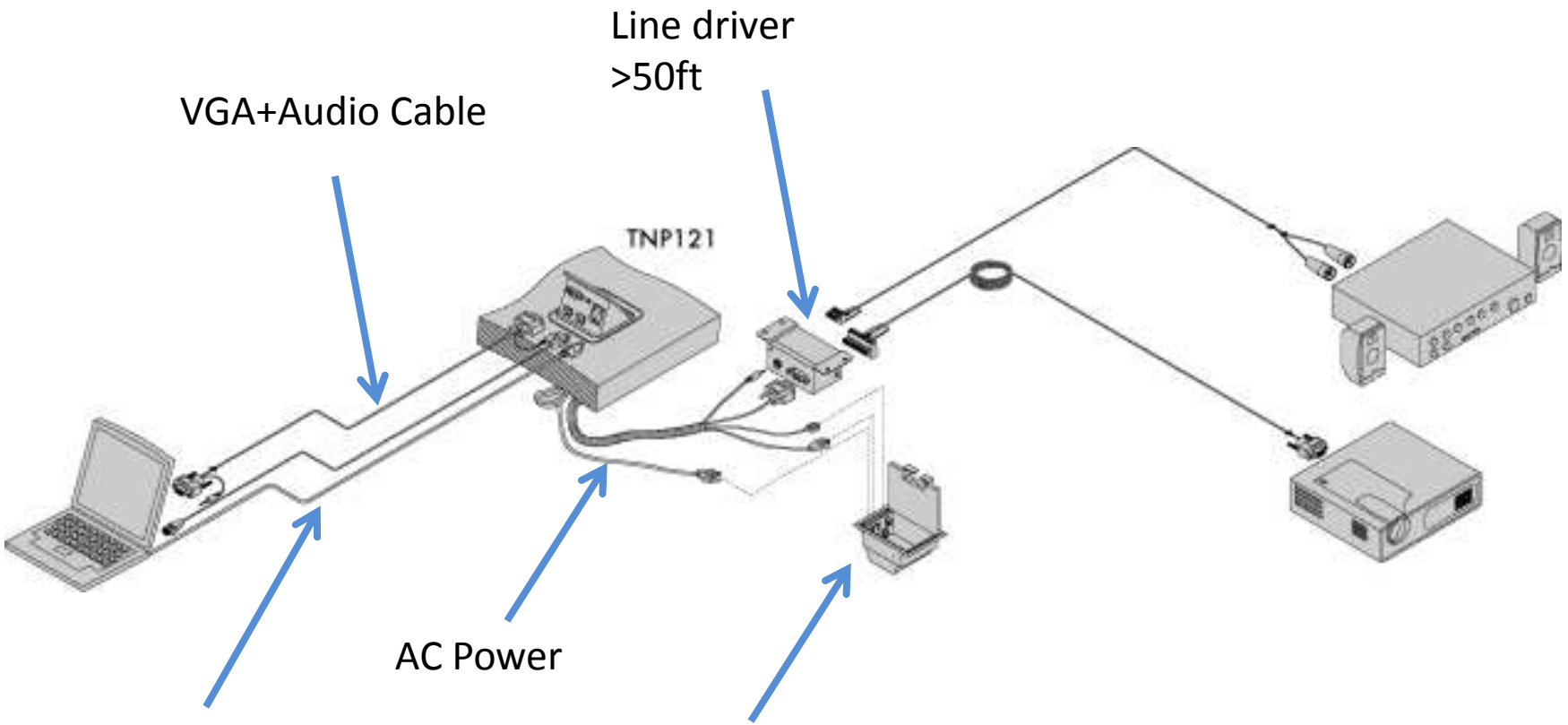
Access Points

Factory Configurable

TNP121

VGA Input
Audio Input
Network
Power

Access points



Access Points

HDMI Input
Audio Input
Network
USB
Power

TNP125

Access Points

VGA+Audio

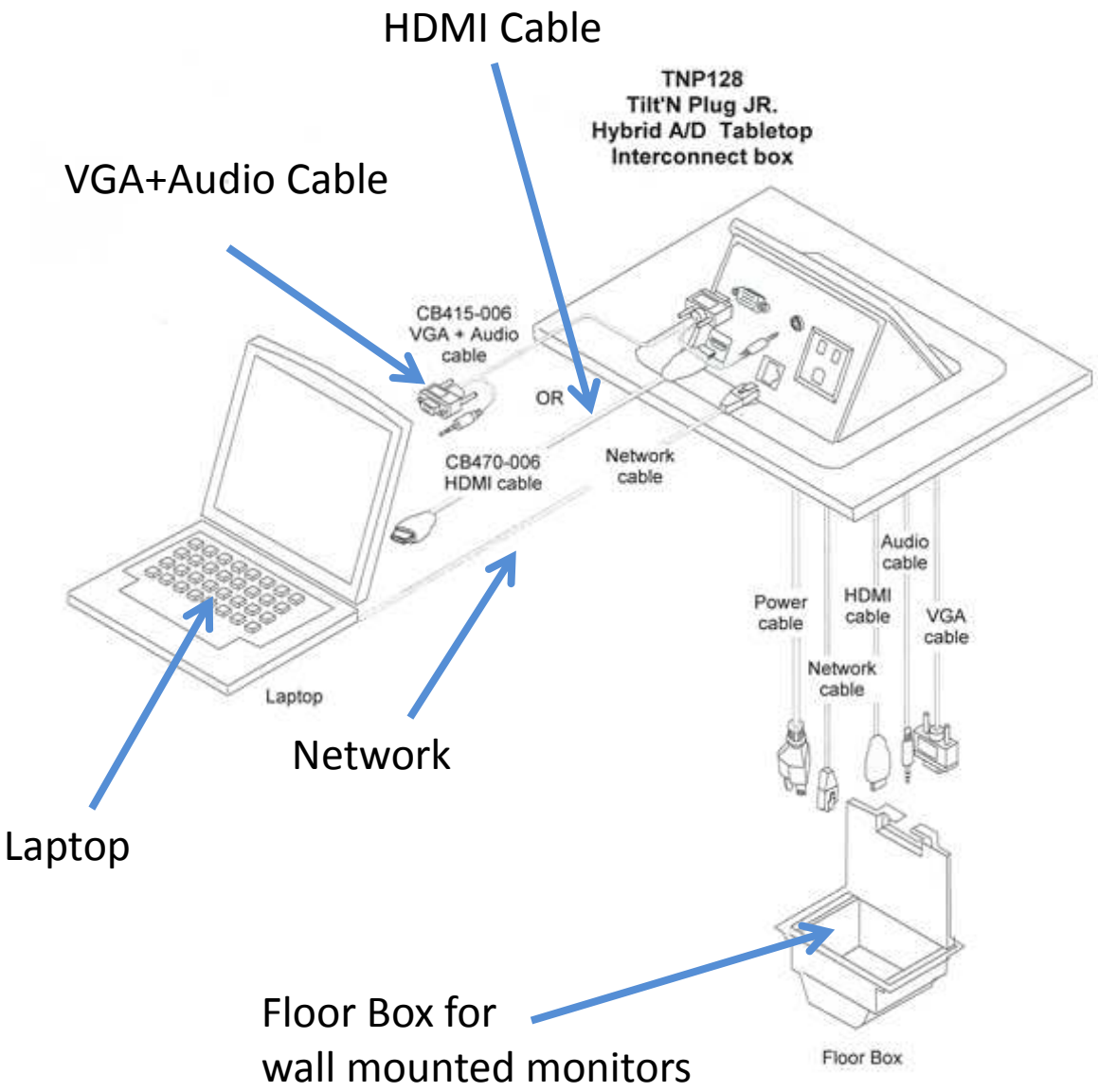
HDMI

AC Power

HDMI Input
VGA Input
Audio Input
Network
Power

TNP128

Access points



Access Points

Pull Out Cables

CNK280

VGA Input
Audio Input
Network
Power

Factory configurable Cables and insert plates

CNK231

Individual Control

Bezel is compatible with many access point devices. This includes TNP and CNK products.

TNP221

Bezel Buttons are provided for system control.

Individual Control

Control Buttons functions:

1. Send video to selected display
2. Wake system up when pressed
3. Indicate if laptop is connected to a display
4. Select video conferencing mode or Room PC mode

Central Control

AVSNAP DESIGN AND CONTROL

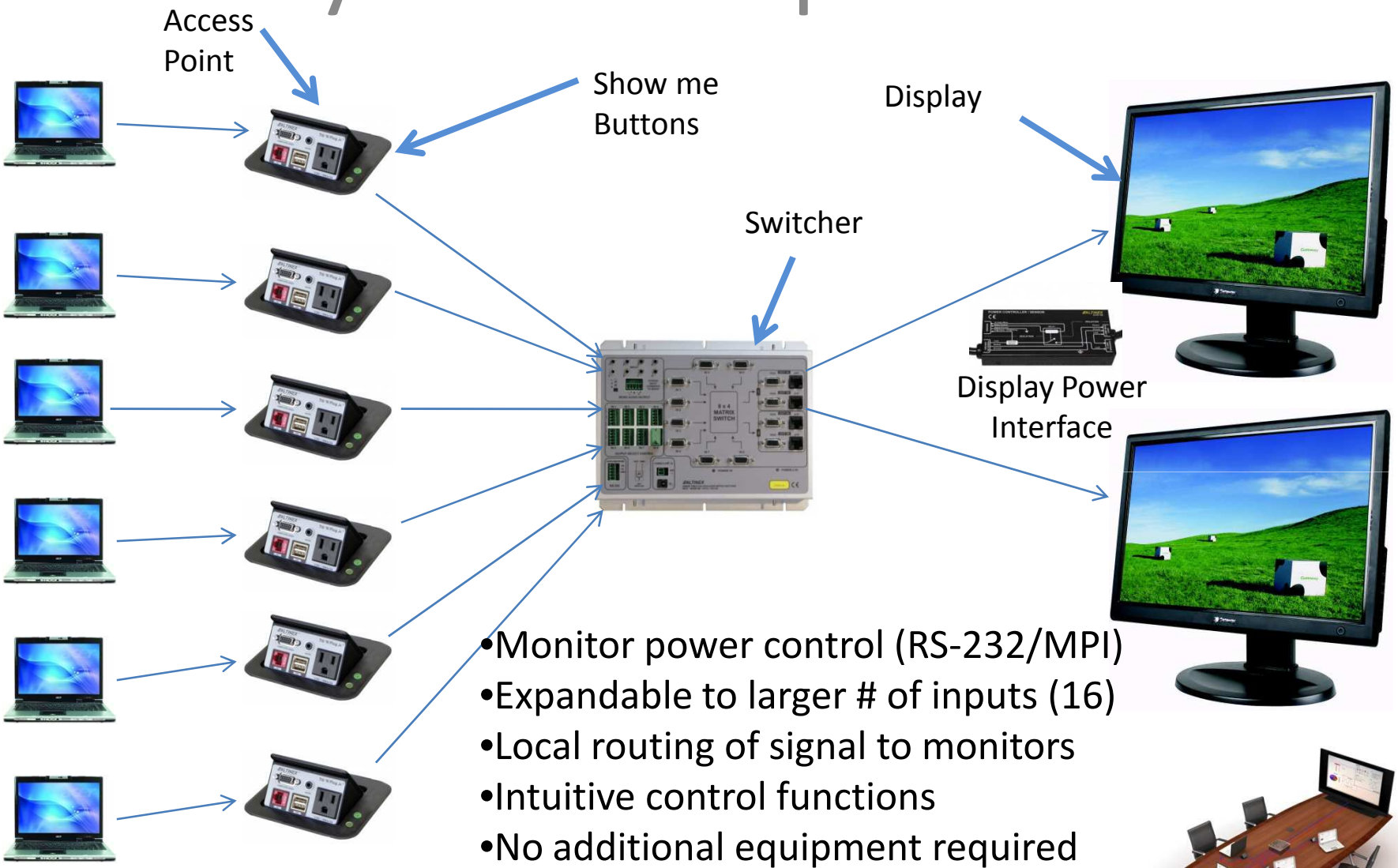
Easy to program

Central control can be provided for the complete system

7”, 8”, 10”, 12” screen sizes are available.

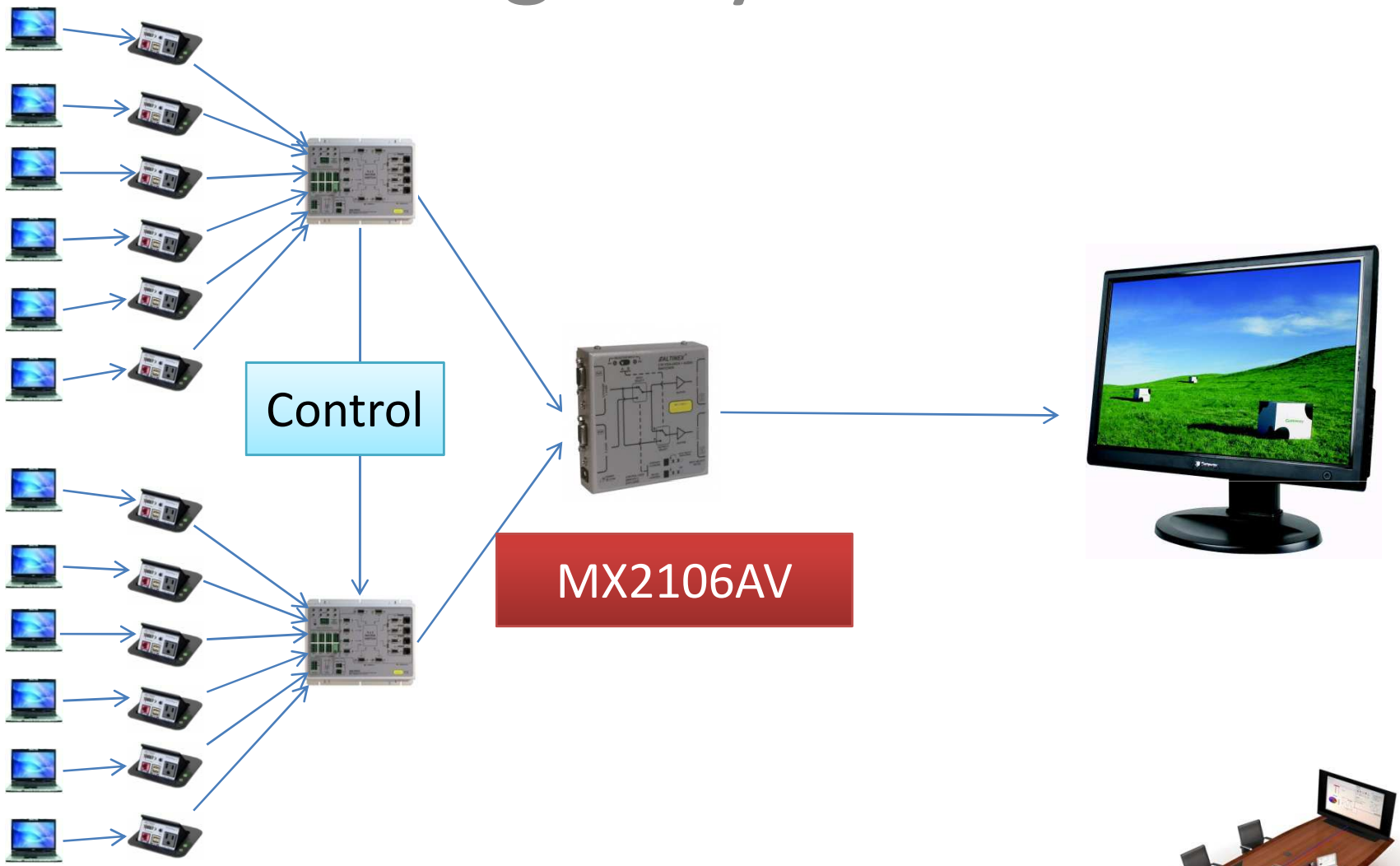
CP450-008

System Components



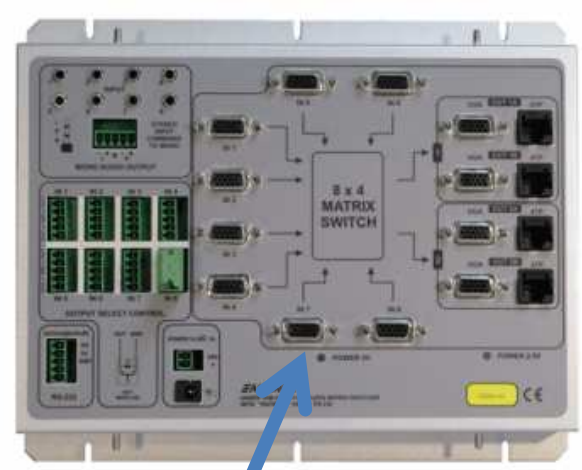
- Monitor power control (RS-232/MPI)
- Expandable to larger # of inputs (16)
- Local routing of signal to monitors
- Intuitive control functions
- No additional equipment required
- Works with Analog and Digital signals (Converter required)

Larger System



Easily expandable to 16 inputs.

Room PC



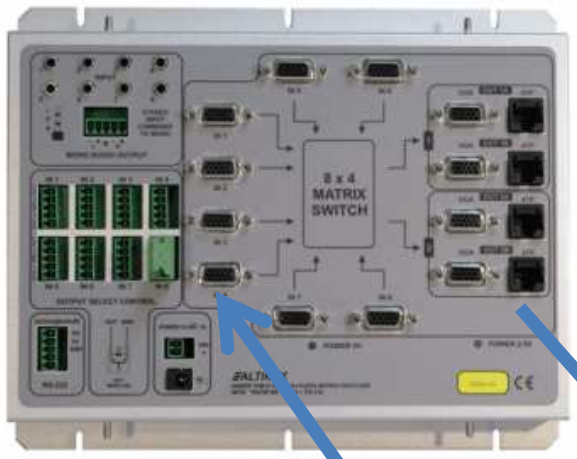
Room PC

Room PC can be used as a default display if no one is connected to the system or as digital signage.
Using wireless keyboard and mouse provides freedom of moving around.

Logo generator can also be used here to display company logo when other sources are not present.

Displays can default to Room PC when all computers are disconnected from input 1 though 6

System Components

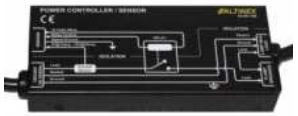


Video conference can be connected through input 8. In this mode, when laptop is disconnected, VC is automatically displayed on the screen.

"Show me" buttons can be used to toggle between laptops and VC

Power Control

RS-232



Display Power Interface

When video signal is present the UT250-101 automatically sends RS-232 code to displays to power them UP or DOWN or switches DPI (Display Power Interface).

Market Opportunities

Video Conference Rooms

Many existing video conferencing installations do not have ability to share multiple laptops for seamless integration.

Market Opportunities

Corporate Boardrooms and Meeting rooms

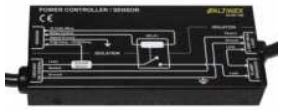
Upgrade existing meeting rooms to collaboration rooms.

BOM (Bill of Materials)

1. TNP221 (Or other products in the same family)

2. UT250-101 Matrix under stable switch with control and cable shroud

3. Assorted VGA/HDMI Thin cables



4. Display Power Interface

5. VGA to HDMI and HDMI to VGA converters

FAQ

1. Can the system be used internationally?
   Yes, however the TNP221 is only designed for US, international version is coming later this year.
2. What is the cost for individual component?
   Please contact your regional sales person or representative for pricing details.
3. Can I control UT250-101 using AMX or Crestron?
   Yes, the under table switcher can be controlled by third party controllers using RS-232 commands.
4. Can I control it through internet.
   Yes, IP to RS-232 adapter is available from Altinex.
5. How far can I run VGA cables?
   Without a line driver about 50ft. With line driver up to 150ft. These numbers are for using a very thin VGA cable (.35” diameter)
6. Can I use my own “Show me” button?
   Yes, we provide a general interface that will work with any external contact closure. (No it is not trademarked, at least we did not find any filings)
7. What is availability of this system?
   All components except TNP221 are available now. TNP221 will be available in the beginning of October.

Do you have any Questions?

Thank you

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